SUPPLEMENT TO THE FLORA OF WHATCOM COUNTY, WASHINGTON

W. C. MUENSCHER

Since the publication of the Flora of Whatcom County, Washington in 1941¹ several visits to the county have afforded opportunity to observe and collect a few additional species. Some of these were previously overlooked, others may represent recent adventives or introductions. These, with annotations and dates for first observation, are here recorded.

POTAMOGETON OBTUSIFICIUS M. & K. This very distinct species of pondweed was abundant during July, 1950, in extensive areas in four to six feet of water in Wiser, Barrett, and Terrell lakes. Apparently it has not been recorded previously from west of the Rocky Mountains south of British Columbia.

ZIZANIA AQUATICA L. Wild Rice. Local on muddy bottom in three to four feet of water toward the west end of Wiser Lake. Numerous visits during the last forty years have never revealed its presence previous to 1950. Probably it was here introduced to improve feeding areas for water fowl.

SCIRPUS CYPERINUS (L.) Kunth. Forming clumps in shallow water in marshy ground about Terrell Lake and Barrett Lake. Not previously reported from west of the Rocky Mountains; possibly introduced in recent years.

POLYGONUM CUSPIDATUM Sieb. & Zucc. Persisting and spreading in several places where it was introduced.

LEPIDIUM PERFOLIATUM L. Although I have known this weed from eastern Washington since 1916 and it is now widespread in the Great Basin area, it does not seem to have been reported before from Whatcom County. On dry bank near shore of Birch Bay; 1950.

RORIPPA SYLVESTRIS (L.) Bess. Established as a weed on slopes in Bellingham and near Lake Whatcom where it was apparently brought in with flower plantings; 1947.

CUSCUTA EPITHYMUM Murr. Clover Dodder. Appeared in cleared upland seeded to red clover near Goshen; 1947. On roadside south of Birch Bay; 1937.

SATUREJA ACINOS L. Scheele. Well established in grassy opening by Silver Lake; 1947. Probably introduced with grass seed.

VERONICA FILIFORMIS Sm. Creeping Speedwell. Spreading from places where it had been introduced as an ornamental in rock gardens, Bellingham; 1947. In the northeastern states it has overrun lawns and become a noxious pest.

ASTER PILOSUS Willd. Appearing as if adventive near the beach, Birch Bay. First observed over several acres in 1943; by 1950 it had spread to large areas of dry gravelly grasslands.

¹Muenscher, W. C. The Flora of Whatcom County, State of Washington-Vascular Plants. 1941. pp. 1-139. Fig. 1-10. Ithaca, N. Y. MADROÑO

COTULA CORONOPIFOLIA L. Common on muddy borders of brackish marshes and margins of tidal streams. I have observed and collected this species from several stations, but failed to record it earlier. Semiahmoo Bay, 1919; Lummi Point, 1933, 1937, 1943; Point Roberts, 1937; Eliza Island, 1939; Chuckanut Bay, 1939; Neptune Beach and Terrell Lake, 1950.

LACTUCA MURALIS Fresen. Common in the shade under evergreen trees in city park, Lynden; 1950.

Department of Botany, Cornell University, Ithaca, New York

AN ANTHRACNOSE DISEASE OF UMBELLULARIA CALIFORNICA¹

JOHN M. HARVEY²

A fungus considered here as belonging to the genus Kabatiella was found to be associated consistently with diseased leaves of the California laurel tree, Umbellularia californica Nuttall, collected in the coast ranges of central California.

Brown, necrotic patches, originating at the tip, lateral margins, or petiolar region of the leaf, are produced by this fungus and may eventually extend over the whole leaf (pl. 3, fig. A). The affected areas often have a rather roughened appearance due to numerous acervuli which break through the epidermis.

Kabatiella seems to be present in such diseased leaves throughout the year, at least in the rather humid and temperate coastal areas where collections were made. The older leaves (2-3 years old) were most commonly infected with the fungus, although in some cases where branches died back for other reasons, Kabatiella was isolated from younger leaves.

TAXONOMY OF THE CAUSAL AGENT

Bubak (1907) established the genus Kabatiella on June 8, 1907, naming a new imperfect fungus, K. microsticta Bubak, found on Convallaria majalis L. A second species, Kabatiella ribis Vasil. on black currant, was described by Vassilievsky (1923). Atkinson and Edgerton (1907) erected the genus Protocoronospora in September, 1907, and described P. nigricans Atk. and Edgert., a pathogenic species found on cultivated vetch, as the type. These authors noted the resemblance of the spores in mass to those of the anthracnose fungi in the order Melanconiales, but regarded the fungus as being a basidiomycete because of the peculiar spore-

162

¹ A revision of a section of a thesis submitted to the Graduate Division of the University of California at Berkeley in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

² The author wishes to acknowledge his indebtedness to Dr. H. N. Hansen and other members of the Division of Plant Pathology for counsel and advice in this work.